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MODIFICATION INSTRUCTIONS

for the

KODAK MINILOADER 1

MODELS STAND-ALONE, & PROCESSOR INTERFACE

Service Codes 3211, & 3212

MODIFICATION No. M34

Type 1 Selective

PURPOSE:

To change the speed of the cam motor to stop cam system malfunctions, to prevent damage to the cam motor relays, and lengthen the life of the cam motor. The cam motor is run at a slower speed, and the cycle time is maintained by changing the gearing of the cam system.

IMPORTANT:	Only qualified service personnel should install this modification!	
SERIAL NUMBERS:	All.	
INSTALLATION TIME:	Approximately 1 hour.	
SPECIAL TOOLS:	CAM CLUTCH TOOL M224 SPRING BALANCE 0 - 20Kg	30015677 29030715
PARTS REQUIREMENT:	MODIFICATION KIT See Parts List on page 2.	30090034
PARTS AVAILABILITY:	November 1992.	

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PARTS LIST

PART NO.	DESCRIPTION	QUANTITY
30013391	CAM MOTOR SPROCKET	1
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CAUTION

This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

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MODIFICATION INSTRUCTIONS

1. Turn off the power to the MINILOADER and remove the MAGAZINE(S).

2. Remove the TOP COVER, the right hand (from the front) SIDE PANEL and the REAR PANEL. If the MINILOADER is a STAND-ALONE machine, go to step 3. If the MINILOADER is connected to a PROCESSOR, it will be necessary to disconnect the MINILOADER from the PROCESSOR. It will also be necessary to dismount PHOTOCELL FC7 from the REAR PANEL as the PANEL is removed.

3. On the CAM MOTOR, identify the CONNECTOR STRIP. Un-solder the WHITE WIRE marked "C" from the CONNECTION that the RED MOTOR WIRE is connected to, and re-solder the WHITE WIRE to the CONNECTION that the GREEN MOTOR WIRE is connected to. See FIGURES 1 & 2.

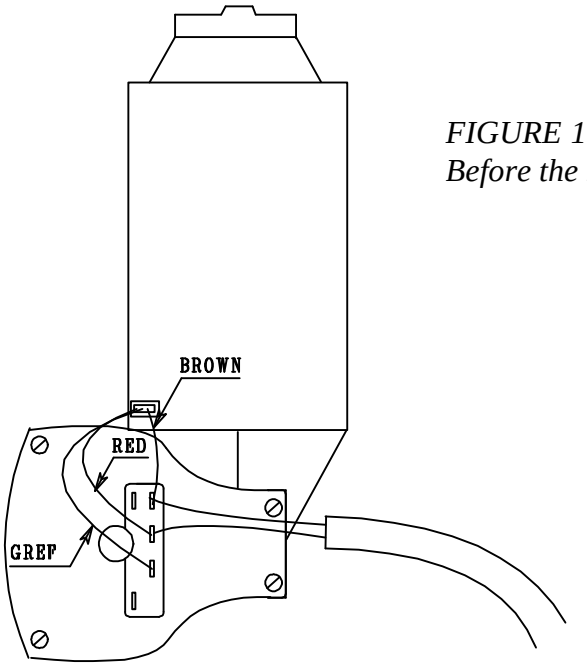


FIGURE 1.
Before the modification.

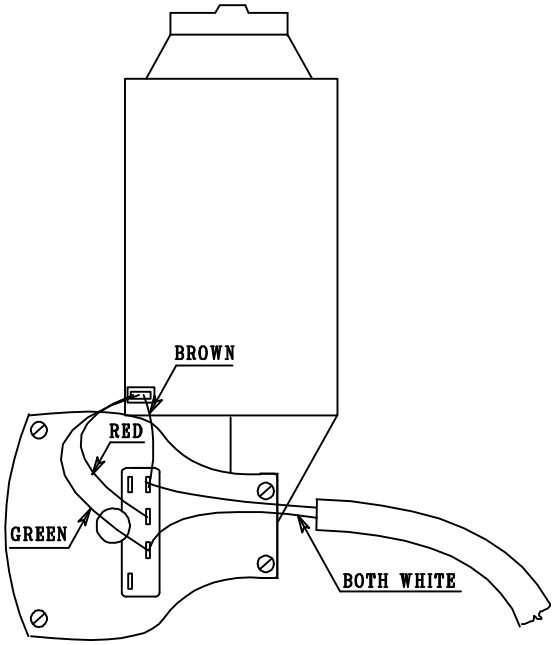
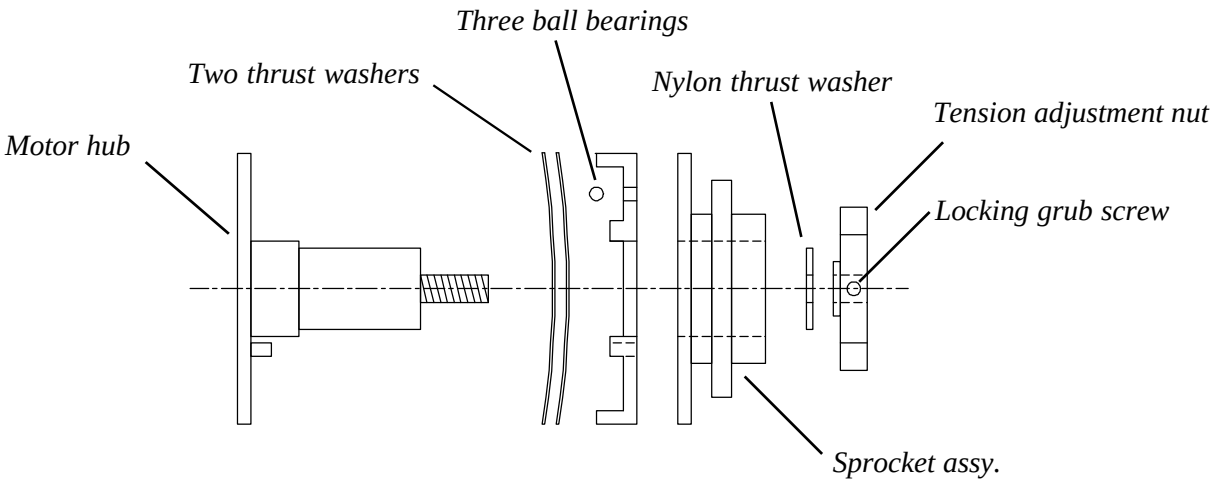


FIGURE 2.
After the modification.

4. Peel back the two LIGHT SEAL STRIPS that cover the heads of the four MOTOR MOUNTING BRACKET SCREWS. Loosen the SCREWS so the MOTOR can be lowered. Lift the CHAIN off the MOTOR SPROCKET. It should not be nesessary to split the CHAIN.

5. Loosen the GRUB SCREW on the MOTOR CLUTCH ADJUSTING NUT, and remove the NUT. See FIGURE 3. Remove the existing CAM MOTOR SPROCKET. CAUTION - TAKE CARE NOT TO LOOSE THE THREE BALL BEARINGS FROM THE CLUTCH.

FIGURE 3



6. Fit the NEW MOTOR SPROCKET, taking care that the BALL BEARINGS are correctly positioned. Refit the MOTOR CLUTCH ADJUSTING NUT, and tighten by hand. Refit the CHAIN on the SPROCKET (if nessesary the CHAIN can be split at the CONNECTING LINK) and move the MOTOR MOUNTING BRACKET up to tension the CHAIN. Tighten the four fixing SCREWS and replace the LIGHT SEAL STRIP. The CHAIN tension is correct when there is a free play of 4 mm at the centre.

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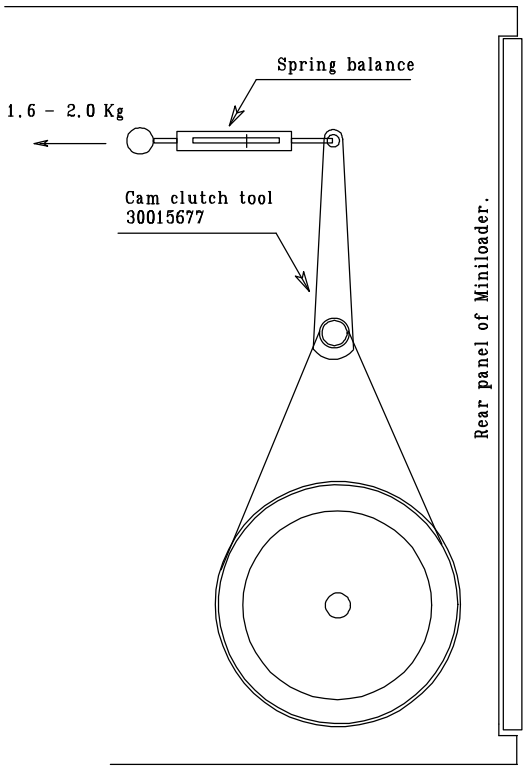


FIGURE 4

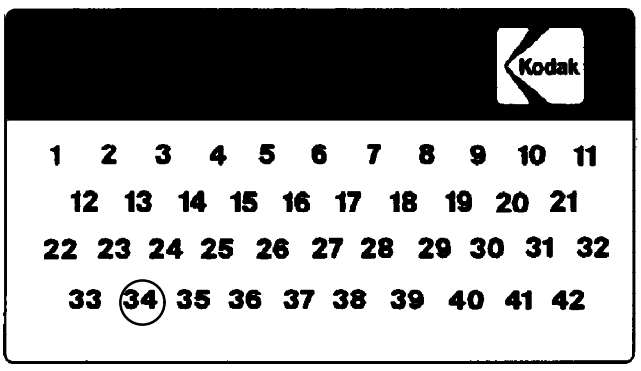
7. Using tool M224 (PART NUMBER 30015677) reset the CAM SYSTEM to HOME POSITION (MICROSWITCH MS1 made). Replace the MAGAZINE(S) making sure that there is no CUSTOMER FILMS in them. Set the tension of the CAM MOTOR CLUTCH by using tool M224. See FIGURE 4. The CLUTCH should slip when a pull of 1.5 to 2 Kg is applied (2.0 to 2.5 Kg for a STAND-ALONE machine). When the correct tension is set, re-tighten the GRUB SCREW in the ADJUSTING NUT.

8. Refit the REAR PANEL, remembering to refit PHOTOCELL FC7 on PROCESSOR INTERFACE MINILOADERS. Remount the MINILOADER on the PROCESSOR if appropriate.

9. Load the SUPPLY MAGAZINE with some TEST FILMS, and run some cycles to check that the CLUTCH does not slip. If necessary, re-adjust the CLUTCH TENSION.

10. Check the gap between films has not changed. If necessary adjust TIMER T14 on PCB 101B/101C (TIMER T3 on PCB 102 on MINILOADERS serial 1101 - 1161 without serial number suffix M).

11. Circle MODIFICATION M34 on the MODIFICATION LABEL and re-assemble the MINILOADER.



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